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ABSTRACT

The present invention relates to a credit card transaction authentication system and method using a mobile terminal. There is provided a credit card transaction authentication system using a mobile terminal for performing a work of credit card authentication for a relay system of a VAN company connected between an approval system of a credit card company, which can approve a credit card settlement of the prices, and a transaction approval terminal, which requests credit card transaction approval by means of contactless radio-frequency identification of the mobile terminal containing a transponder therein. The credit card transaction authentication system includes a process server connected with the relay system of the VAN company though a network, for operating a site, which provides an environment capable of performing registration and modification of credit card information for a credit card settlement function by means of the contactless radio-frequency identification of the mobile terminal, and for controlling the credit card transaction authentication system to perform the work of credit card authentication for the relay system of the VAN company; an authentication engine which in accordance with control of said process server, upon receipt of credit card authentication request data on the mobile terminal from the relay system of the VAN company that has received price settlement request data generated from the transaction approval terminal by means of the contactless radio-frequency identification of the mobile terminal, extracts credit card connection information set in the mobile terminal, based on the received authentication request data and transmits authentication data to the relay system of the VAN company; and a database server for storing information on a user utilizing the mobile terminal, the credit card connection information resulted from the contactless radio-frequency identification of the mobile terminal, and

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information on a peculiar code of the transponder contained in the mobile terminal, according to the control of the process server.

The present invention provides advantages that a cumbersome procedure in which the credit card should be handed over and taken again by the user upon making the credit card settlement can be eliminated, and stability of credit card information can be enhanced so that a commercial transaction can be briskly made.